

AMENDMENT

In The Claims:

Please amend the claims as follows:

1. (Currently Amended) Cysteine Isolated cysteine containing peptides of the structure

XXCCXXXXXXXXCXXXCXXXXXXQXXCXXXCXCXXXXXXCXXXXXX (SEQ ID NO:
12)

or of the structure

XXCCXXXXXXXXCXXXCXXXXXXCXXXCXCXXXXTXXCXXXXXX (SEQ ID NO:
13)

or of the structure

XXCCXXXXXXXXCXXXCXXXXXXCXXXCXCXXXXXXCXXXXXX (SEQ
ID NO: 14)

wherein X, independently of one another, represents any naturally occurring amino acid.

2. (Currently Amended) Cysteine Isolated cysteine containing peptides of SEQ ID NO: 12
and SEQ ID NO. 13 according to claim 1, wherein at position 15 the amino acid G and/or at
position 19 the amino acid T and/or at position 23 the amino acid Q and/or at position 27 the
amino acid Q and/or at position 28 the amino acid R and/or at position 31 the amino acid D
and/or at position 33 the amino acid I and/or at position 34 the amino acid H and/or at position
35 the amino acid V and/or at position 36 the amino acid T and/or at position 37 the amino acid

T and/or at position 38 the amino acid T and/or at position 43 the amino acid S and/or at position 44 the amino acid H and/or at position 46 the amino acid S is located.

3. (Currently Amended) Cysteine Isolated cysteine containing peptides according to claim 1; namely

KSCCRNTLGRNCYNGCRFTGGSQPTCGRLCDCIHVTTTCPSSHPS (SEQ ID NO: 1)

(hellethionin-A),

KSCCRNTLGRNCYNACRFTGGSQPTCGRLCDCIHVTTTCPSSHPS (SEQ ID NO: 2)

(hellethionin-B1), KSCCRNTLARNCYNACRFTGGSQPTCGRLCDCIHVTTTCPSSHPS

(SEQ ID NO: 3) (hellethionin-B2),

KSCCRNTLGRNCYNACRLPGTPQPTCATLCDCIHVTTTCPSSHPR (SEQ ID NO: 4)

(hellethionin-B3), KSCCRNTLARNCYNACRFTGTSQPYCARLCDIHVTTTCPSSHPR

(SEQ ID NO: 5) (hellethionin-B4),

KSCCRNTLARNCYNACRFTGGSQPTCATLCDCIHVTTTCPSSHPR (SEQ ID NO: 6)

(hellethionin-B5), KSCCRNTLARNCYNVCRFGGGSQAYCARFCDCIHVTTTCPSSHPS

(SEQ ID NO: 7) (hellethionin-B6),

KSCCRNTLGRNCYNACRLTGTSQATCATLCDCIHVVTATTCPYPYPS (SEQ ID NO: 8)

(hellethionin-C),

KSCCRNTLARNCYNACRFTGGSQPTCGILCDCIHVTTTCPSSHPS (SEQ ID NO: 9)

(hellethionin-D),

KSCCRNTLGRNCYAAACRLTGLFSQEQCARLCDCITVTTPTPCPRTHPS (SEQ ID NO: 10) (hellethionin-E1),
KSCCRNTLGRNCYAAACRLTGTFSQEQCARLCDCITVTTPTPCPRTHPS (SEQ ID NO: 11) (hellethionin-E2).

4. (Currently withdrawn) Nucleic acid sequence, which encodes a cysteine containing peptide compound according to claim 1.

5. (Currently withdrawn) RNA sequence and anti-sense RNA according to claim 4.

6. (Currently withdrawn) DNA sequence and anti-sense DNA according to claim 4.

7. (Currently Amended) Ester derivatives, amide derivatives, halogen derivatives, and methyl derivatives, ~~salt derivatives, cyclic derivatives and derivatives with a modified backbone~~ of the isolated cysteine peptides according to claim 1.

8. (Currently withdrawn) DNA vector or DNA construct, which contains a DNA sequence according to claim 6.

9. (Currently withdrawn) Monoclonal antibodies targeted against an epitope of the cysteine containing peptides according to claim 1.

Claims 10-32. (Cancelled)

33. (Currently withdrawn) A method for the treatment or prophylaxis of a disease comprising administering to a patient in need thereof cysteine containing peptides according to claim 1, or functional derivatives of these peptides or mixtures thereof or pharmaceutically acceptable salts of these compounds.

34. (Currently withdrawn) The method of claim 33, wherein the disease to be treated is caused by a pathogen, bacteria, fungi or viruses.

35. (Currently withdrawn) The method of claim 33, wherein the disease to be treated is a disease of humans and animals, particularly of horses.

36. (Currently withdrawn) The method of claim 33, wherein the disease to be treated is a disease caused by defective bioregulation of the immune system or are accompanied by a defective bioregulation of the immune system.

37. (Currently withdrawn) The method of claim 33, wherein the disease to be treated is an autoimmune disease, cancer or AIDS.

38. (Currently withdrawn) The method of claim 37, wherein the cancer is selected from the group comprising choroidal melanoma, acute leukaemia, acoustic neurinoma, ampullary carcinoma, anal carcinoma, astrocytoma, basal cell carcinoma, pancreatic cancer, bladder cancer, bronchial carcinoma, breast cancer, Burkitt's lymphoma, corpus cancer, CUP-syndrome, colorectal cancer, small intestine cancer, small intestinal tumors, ovarian cancer, endometrial carcinoma, ependymoma, epithelial cancer types, Ewing's tumors, gastrointestinal tumors, gallbladder cancer, uterine cancer, cervical cancer, glioblastomas, gynecologic tumors, throat, nose and ear tumors, hematologic neoplasias, hairy cell leukemia, urethral cancer, skin cancer, brain tumors (gliomas), brain metastases, testicle cancer, lymph node cancer (Hodgkin's/Non-Hodgkin's), hypophysis tumor, carcinoids, Kaposi's sarcoma, laryngeal cancer, germ cell tumor, bone cancer, colorectal carcinoma, head and neck tumors, colon carcinoma, craniopharyngiomas, oral cancer (cancer in the mouth area and on lips), liver cancer, liver metastases, leukaemia, eyelid tumor, lung cancer, lymphomas, stomach cancer, malignant melanoma, breast carcinoma, rectal cancer, medulloblastomas, melanoma, meningiomas, Hodgkin's disease, mycosis fungoides, nasal cancer, neurinoma, kidney cancer, non-Hodgkin's lymphomas, oligodendrogloma, esophageal carcinoma, osteosarcomas, ovarian carcinoma, pancreatic carcinoma, penile cancer, plasmacytoma, prostate cancer, pharyngeal cancer, rectal carcinoma, retinoblastoma, vaginal cancer, thyroid carcinoma, Schneeberger disease, esophageal cancer, spinal glioma, T-cell lymphoma (mycosis fungoides), thymoma, tube carcinoma, eye tumors, urethral cancer, urologic tumors, urothelial carcinoma, vulva cancer, wart appearance, soft tissue tumors, Wilm's tumor, cervical carcinoma and tongue cancer.

39. (Currently Amended) Pharmaceutical composition, comprising one or more isolated cysteine containing peptides according to claim 1 or functional derivatives of these peptides or pharmaceutically acceptable salts or mixtures of these compounds.

40. (Previously presented) Pharmaceutical composition according to claim 39, further comprising at least one carbon suboxide derivative.

41. (Previously presented) Pharmaceutical composition according to claim 39, further comprising at least one cytostatically or cytotoxically active compound.

42. (Previously presented) Pharmaceutical composition according to claim 40, further comprising at least one cytostatically or cytotoxically active compound.

43. (Currently withdrawn) Method for the extraction of the cysteine containing peptides according to claim 1 by extraction from the Helleborus plant species.

44. (Currently withdrawn) Method according to claim 43, wherein a defatting of the plant material using non-polar solvents is carried out as first step of the method, particularly using tert.-butylmethylether.

45. (Currently withdrawn) Method for the production of the cysteine containing peptides according to claim 1 by gene technological methods.

46. (Currently withdrawn) Method according to claim 45, wherein the thionine genes of a thionine producing corn are replaced by the thionine genes of species of the plant Helleborus.

47. (Currently withdrawn) Method for the synthetic production of the cysteine containing peptides according to claim 1 and of functional derivatives of these peptides by peptide synthesis.